Child Care Industry Trends During the Recovery from the COVID-19 Pandemic

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KEY POINTS

This brief reports important trends in the child care industry during the first two years of the COVID-19 pandemic from 2020 to 2022 and places those trends in a historical context. Importantly, due to data limitations, this analysis does not include providers with no employees. As such, family child care providers with no employees and providers who are family members, friends, or neighbors were not included. Specifically, we find:

- Nationally, child care employment as of November 2022 has not returned to pre-pandemic levels, with significant variation at the state level.
- States where the child care industry was hit hardest in the spring of 2020 also saw slower recovery.
- While the number of child care programs increased since before the pandemic, the number of employees per program decreased.
- Average hourly earnings (both adjusted for inflation and unadjusted) for child care workers were higher in August 2022 than before the pandemic earnings, due to increases in non-supervisory workers’ earnings.
- Maternal labor force participation declined in the beginning of the pandemic, possibly as both a driver and a consequence of decreased employment in the child care industry. Like overall labor force participation, it remains below pre-pandemic levels.
- American Rescue Plan funding has been critical to help support child care markets recover during the pandemic. As more data become available, research can identify the specific ways the funding has bolstered child care employment and earnings.

BACKGROUND

The COVID-19 pandemic immediately disrupted employment in the U.S. child care industry1 (defined below) with a sharp drop of more than one-third (Crouse, 2020). Many child care providers closed as some parents kept their children home, other parents lost employment and no longer needed child care, and some state and local officials ordered child care providers to temporarily close. Providers that stayed open were faced with the difficult task of keeping children safe in an uncertain environment, including cleaning and sanitizing surfaces, caring for children in small cohorts, and helping children wear masks. Operating costs of providers rose

1 We use the term “child care industry” to maintain some consistency with BLS terminology, but it would also be accurate to call this the “early care and education industry” because our data includes many preschool and Head Start programs.
because of smaller child group size requirements, and the need to purchase personal protective equipment, and sanitation materials, while providers’ earnings decreased with fewer children enrolled (Malik, 2020). These compounding challenges wore on the workforce: a survey fielded in late spring of 2020 showed very high levels of depression and anxiety among child care professionals (Elharake et al., 2022).

This brief includes trends in the child care industry beginning in the early 2000s to provide context on how the industry has been impacted by the pandemic. Using labor force data from multiple sources, we examine changes in child care employment and wages, as well as the number and size (i.e., number of staff) of child care programs. We also explore labor force trends for mothers of young children, which may relate to the demand and supply of child care.

This brief includes a focus on maternal employment, as disruptions in the child care industry had a disproportionate effect on women. This is for two main reasons. First, 95 percent of child care workers are women. Second, women are often the primary caregivers for children, in both two-parent and single-parent families (Horowitz et al., 2017; Boesch and Hamm, 2020). Child care closures meant that many mothers reduced their level of employment to care for their children (Ranji et al., 2021).

During the extended COVID-19 economic downturn, the American Rescue Plan (ARP), signed by President Biden on March 11, 2021, provided communities with economic relief and families with direct economic support. Among the measures, the ARP provided $39 billion in new child care funding, including $24 billion for child care stabilization grants to providers and $15 billion in supplemental funding to states’ Child Care and Development Fund programs. These funds have played a critical role in supporting the child care sector. The Administration for Children and Families recently documented how the stabilization funds reached thousands of child care providers and impacted as many as 9.5 million children in state by state profiles. The data used in the current analysis are not able to assess the role of ARP funding on the child care employment and earnings. We expect that many of the national and state trends identified in this brief – particularly differences in how state markets recovered – can be explained by the amount of ARP funding and how that funding was utilized.

DATA SOURCES


Our analysis is limited by the availability of national and state industry and employment data sources. Data on industry and occupations are categorized by official classification systems that are not designed to perfectly reflect the child care industry. To appropriately interpret this analysis, it is important to understand which types of providers and employees are included and which are excluded.

To identify child care programs and their employees, we use the industry code for “Child Care Services” from the North American Industry Classification System (NAICS), code 6244. The following types of programs and employees are included:

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4 These payments support child care subsidies for low-income families and program quality improvements.
5 This brief does not contain an analysis of the child care worker occupation, which is addressed by a separate data product also produced by BLS. Whereas industry data focuses on business establishments (and employees of those establishments), occupational data focus on the workers themselves. The two concepts overlap but are not identical.
• Centers, providers, or programs including Head Start and preschool classrooms that are not part of an elementary or secondary school (i.e., employees are not on the school’s payroll),
• Family child care providers with at least one employee (owner plus at least one other employee),
• Both child care employees who do and do not provide direct care for children: cooks, janitors, and executive directors are all included.

The data do not contain any information on child ages or regulated/licensing status. Therefore, programs serving infant/toddlers, preschoolers, and school-age children are all included, as long as they fall into the criteria above. Similarly, regulated and unregulated, licensed and unlicensed programs are included, as long as they fall into the criteria above.

The following establishments and their employees are not included in this industry code and our analyses:

• Providers with no employees, including:
  o Small family child care providers with no employees
  o Family, friend, and neighbor care
• Classrooms, providers, or programs that are part of an elementary or secondary school, which are captured under a different NAICS code for “Elementary and Secondary Schools.”

TRENDS IN THE CHILD CARE INDUSTRY

Child Care Employment in July 2022 Had Not Yet Returned to Pre-Pandemic Levels, With Considerable Variation Across States

Before the pandemic, the child care industry experienced a steady increase in the number of employees from 2013 through early 2020, peaking at 1.05 million in February 2020. When the pandemic began, employment in the industry dropped 35 percent to 680,000 in April 2020, as shown in Figure 1. After that immediate decline, employment in the child care industry steadily increased. In November 2022 employment reached 92 percent of the February 2020 level.

Figure 1. Employees in the Child Care Industry, Seasonally Adjusted, November 2006 to November 2022

All states saw sharp child care employment contractions immediately (Figure 2). By June 2022, only five states had recovered to pre-pandemic employment levels. The left map in Figure 2 shows the immediate decrease in child care employment from February to April 2020. This represents both how the variation the industry downturn affected states and how state policies impacted the industry. The right map shows the change in child care employment over a longer period from February 2020 to June 2022.

The bar chart below the maps presents the same information but with a side-by-side comparison of the two periods’ data for each state and with all states ordered from smallest to largest in terms of their immediate employment decline from February to April 2020 (i.e., each state’s left-hand bar). Each state’s right-hand bar reflects the persisting reduction in child care employees as of June 2022. The difference between each state’s left-hand and right-hand bar reflects the recovery in child care employment that occurred by June 2022.

As seen in the left-hand map in the top panel of Figure 2, most of the states with the greatest child care employment contractions from February to April 2020 were in the eastern half of the country. Alaska and Nevada were the only exceptions. The median contraction was -32 percent. Rhode Island had the maximum contraction (-75 percent) and South Dakota and Oklahoma had the minimum (-17 percent). Rhode Island, Kentucky, Connecticut, New Hampshire, Pennsylvania, Massachusetts, and Ohio had the greatest declines in child care employment between February and April 2020, with drops of 50 percent or greater. State-wide mandates of child care closures possibly contributed to these contractions (although a direct analysis of this relationship is beyond the scope of this analysis). For example, 27 states and territories had closed schools in March of 2020, and many states and territories had closed child care during this time as well.

The right-hand map in the top panel of Figure 2 focuses on child care employment recovery through June 2022. Hawaii, Maryland, Arizona, Alaska, and the District of Columbia had the weakest employment recovery, with levels that were 16 percent or more below the levels in February 2020. While these states had the weakest recovery, the initial impact of the recession on these states varied from about 20 percent for the District of Columbia to 44 percent for Maryland. Idaho, Kansas, North Dakota, Oklahoma, Utah, and Wyoming were the only states where employment increased in comparison to February 2020.

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8 Per the National Bureau of Economic Research, the recession was dated from March to April 2020. (https://www.nber.org/news/business-cycle-dating-committee-announcement-july-19-2021)
Figure 2. Change in Number of Child Care Employees by State, February 2020 to June 2022

Note: Though labeled – 38, Montana is shaded gold rather than brown since February to April 2020 = – 37.51.

States Where the Child Care Industry Was Most Affected by COVID-19 Saw Slower Long-Term Recovery

The severity of COVID-19’s initial impact on the child care industry in each state predicted a slower longer-term recovery in child care employment. The scatterplot in Figure 3 shows the relationship between the immediate percentage change in child care employment at the pandemic’s onset from February to April 2020 (horizontal-axis), and the longer-term percent change in child care employment from February 2020 to June 2022 (vertical-axis). The gray dotted line shows the average relationship between these two measures across the states. As an example, Rhode Island (the farthest left dot) had the greatest reduction in initial employment (based on the horizontal-axis), and an average recovery through June 2022 (based on the vertical-axis).

Figure 3. Relationship between Initial Impact of COVID-19 on Child Care Employment and Recovery through June 2022, by State

Not shown: The figure shows the percent change from February 2020 to April 2020 versus percent change from February 2020 to June 2022. The slope of the average trend line is 0.13; R2 = 0.058.


On average, states with more dramatic initial reductions in child care employment (February to April 2020) saw less of a recovery in child care employment from February 2020 to June 2022. However, this is not the case for all states. Some states, like Rhode Island and Connecticut, had sharp, immediate decreases in child care employment when the pandemic began, but experienced relatively fast recoveries in child care employment. Other states, like Maryland and Hawaii saw a little above average immediate employment decreases, but much slower recoveries in child care employment.
The Number of Child Care Programs Rose Following the Spring of 2020, but with Fewer Employees per Program

Figure 4 below shows the historical trends in the total number of child care programs and the number of employees per program.

Figure 4. Child Care Programs and Average Employees per Program, June 2006 to June 2022


In 2016—after five years of no growth—the number of child care programs began to increase as seen in the bottom panel of Figure 4. Not only was the number of programs increasing but the size of programs grew, as measured by the ratio of employees to programs. By February 2020, the ratio reached a high of 14.2 employees per program as shown in the top panel of Figure 4. This finding is consistent with other research showing that since the mid-1990s, children were increasingly more likely to be in center-based care (which tend to have more employees) and less likely to be in family child care (which have fewer employees) (Swenson and Burgess Simms, 2020).

Following the initial pandemic shock from February to April 2020, the number of child care programs rebounded more quickly than the number of employees. By the second quarter of 2021, the number of programs was larger than the previous peak in the first quarter of 2020. By June 2022 given the lagging recovery in child care employment, the number of employees per program was below pre-COVID-19 numbers. Given that infants and toddler classrooms often require higher staff-to-child ratios, this could point to a dwindling supply of infant and toddler slots.
Figure 5 shows the variation in the change in child care programs across states. In 11 states, the number of child care programs decreased from the first quarter of 2020 to the second quarter of 2022; four of those states had decreases of four percent or more. In 39 states (including the District of Columbia) the number of child care programs increased; 19 of these jurisdictions had increases of four percent or more.

Figure 5. Percentage Change in Number of Child Care Programs from First Quarter of 2020 to Second Quarter of 2022


Average Hourly Earnings for Child Care Workers Were Higher in April 2022 Than Before the Pandemic, Due to Increases in Non-supervisory Workers’ Earnings

Nominal average hourly earnings of all employees in the child care industry rose since early 2016. Real earnings — that is, adjusted for inflation — also grew, though at a slower pace (see Figure 6). At the immediate onset of the pandemic, from February to April 2020, constant earnings increased substantially, from $18.70 per hour in February 2020 to $20.11 per hour in April 2020 (inflation-adjusted). Wages then decreased to $19.32 per hour in June 2022. As context, in the private sector as a whole, earnings also increased

9 These dollar figures are for all employees in the child care industry (6244), as defined at the beginning of the brief. Please note that median hourly wages for the child care worker occupation was $13 in 2021. This brief includes analysis of the child care industry, not of the child care worker occupation. For more information on the child care occupation, such as who is and is not included, please refer to https://www.bls.gov/ooh/personal-care-and-service/childcare-workers.htm
substantially from February to April of 2020, but unlike the child care industry, continued to increase through 2022 (after an initial decrease from April to July of 2020).\textsuperscript{10}

It is possible the initial increase in earnings was impacted by the change in the makeup of the child care workforce. We found that the child care workforce shifted because a greater share of lower-paid non-supervisory employees were laid off than supervisory employees, 36 percent versus 29 percent. This shift was only temporary; by April 2021 the ratio of supervisors to non-supervisors returned to 89 percent of the February 2020 level (see Figure A.2 in the Appendix).

Figure 6 compares the earnings for supervisory and non-supervisory child care workers. Real average hourly earnings for non-supervisory workers (teachers, assistants, and other staff), had an initial increase of a $1.00 per hour from $16.90 in February 2020 to $17.90 in April 2020, a level it would not see again until October 2022. Earnings for supervisory workers had a large uptick in the fall of 2020 peaking at $36.60 per hour (in inflation adjusted dollars) in September 2020 and then decreasing to $28.50 per hour in October 2022.

\textbf{Figure 6. Average Hourly Earnings of Child Care Employees, Constant Dollars, October 2006 to October 2022, Seasonally Adjusted (Private Sector Only)}

\begin{figure}[h!]
\centering
\includegraphics[width=\textwidth]{figure6.png}
\caption{Average Hourly Earnings of Child Care Employees, Constant Dollars, October 2006 to October 2022, Seasonally Adjusted (Private Sector Only)}
\end{figure}

\textbf{Note}: The supervisory series shown here is not a Bureau of Labor Statistics data series but is calculated by ASPE from the other two series (i.e., Supervisory employees = All employees minus Nonsupervisory employees). Each series seasonally adjusted individually. Shaded areas denote the NBER designated periods of recession from December 2007 to June 2009 and February 2020-April 2020.

For the variation in weekly average constant dollar earnings by state in the first quarter of 2020 and the second quarter of 2022, see Figure A.1 in the appendix. For the change in each state’s total child care payroll

\begin{footnotesize}
\textsuperscript{10} Total private: \url{https://fred.stlouisfed.org/series/CES05000000003}. Production and non-supervisory: \url{https://fred.stlouisfed.org/graph/?id=AHETPI}
\end{footnotesize}
(which is a function of the changes in the number of employees, hourly wages, hours worked, and inflation) from first quarter 2020 to seconds quarter 2022, see Figure A.4 in the appendix.

MATERNAL LABOR FORCE PARTICIPATION DECLINED DURING PANDEMIC: A CONSEQUENCE OR A DRIVER OF CHILD CARE INDUSTRY DYNAMICS?

This section focuses on the employment and labor force participation of mothers with at least one child under age six. Importantly, labor force trends for this population are not the same as trends for other women or all mothers. For example, women with at least one child under age six make up only 44 percent of mothers with children and only 15 percent of women 18 to 64.\textsuperscript{11} Furthermore, we would expect the labor force participation of this group to be more closely linked to child care availability, relative to women in general or mothers in general. Thus, women with children under age six is a small and unique subgroup of women and of mothers, and this subgroup is the focus of this analysis.

Many working mothers rely on child care providers to stay employed and work in the labor force, and the share of working, mothers who solo-parent has steadily increased over the past five decades (Glynn, 2019). Participation of mothers in the labor force could be viewed as both driver of demand for child care and a result of the availability of child care. Research has documented that mothers’ labor force participation is responsive to the availability and cost of child care (Morrisey, 2017).

The pandemic immediately and dramatically affected overall employment. Maternal employment, as seen in Figure 7, was hard hit at the onset of the pandemic. The figure shows trends in employment and labor force participation for mothers with children under six.\textsuperscript{12} The top panel shows the rates, and the bottom panel shows the total number employed and the total number in the labor force (i.e., those employed plus those unemployed but actively looking for work). The employment and labor force participation. Note that the number of mothers in the labor force has been declining but that the rate rose prior to the pandemic owing largely to the decline in the population of mothers with children under six, which is the denominator of both rates (see Figure A.3 in the appendix for the population of mothers of children under six). As seen by the red line in the top panel, following the onset of the pandemic, the percentage of mothers with children under six who were employed declined precipitously following eight years of steady growth. This percentage rose in 2021, though still had not reached pre-pandemic levels. Similarly, the pandemic’s effect is also reflected in the employment line in the bottom panel: from 2019 to 2020, employment among mothers with children under six dropped from 9.7 to 9.1 million.

\textsuperscript{11} IPUMS USA, University of Minnesota, www.ipums.org.

\textsuperscript{12} Although not shown in this analysis, mothers with younger school-aged children (ages 6-12), who also require child care for before and after care and summer care (and in some cases for full-day care during the pandemic-related school closures) also experienced a drop in employment: https://www.dol.gov/sites/dolgov/files/WB/media/Mothers-employment-2%20-years-later-may2022.pdf
Figure 7. Labor Force Participation and Employment of Mothers with Children under Age 6, 2001 to 2021


While employment levels rose, mothers of preschool-aged children in the labor force continued to decline through 2021, from 10.1 to 9.7 million. This is shown by the blue lines in both panels of Figure 7. As a result of mothers of small children dropping out of the labor market, the maternal unemployment rate decreased.

The immediate decrease in employment of mothers with young children at the pandemic’s onset was likely driven in part by the closing of child care providers. It also could have been the consequence of families choosing to keep children home for health and safety reasons requiring mothers to take on more care responsibilities. Lack of child care availability made it difficult for many mothers to continue work and may have also initially slowed employment recovery. Relatively lower employment and labor force participation among women in the early months of the pandemic may have in turn contributed to a slow recovery in employment in the child care industry (since women make up a majority of the child care workforce13).

Figure 8 compares the differences in maternal labor force trends across the major race and ethnic groups, which may affect how the child care industry relates to labor force trends. Black non-Hispanic women’s labor force participation rate—highest among major race and ethnic groups—peaked in 2018 and began to decrease thereafter. Asian, Hispanic, and White non-Hispanic women’s labor force participation rates reached all-time highs in 2020. Participation dropped for every group from 2020 to 2021, consistent with the national decline seen in Figure 7. Variations in Asian women’s labor force participation rate from 2004 to 2012 may be exaggerated due to small sample size, but thereafter track fairly closely to those of Hispanic women.

DISCUSSION

Using national and state labor force data, this brief summarizes trends in employment and earnings in the child care industry from before the onset of the COVID-19 pandemic in February 2020 through 2022. While employment in the child care industry did not recover to pre-pandemic levels, the number of child care programs recovered and exceeded pre-pandemic levels.

States differed substantially in the effect of the COVID-19 pandemic on the child care industry. The drop in child care employment after the immediate onset of the pandemic ranged from 17 percent to 75 percent. States also varied in their subsequent recovery, with all states but Utah continuing to see lower employment levels than before the pandemic. Generally, states whose child care industry was most affected by the first months of the pandemic had a slower recovery.

More research is needed to understand factors driving the child care employment and earnings recovery, particularly to understand differences across states during this time period. One of the biggest open questions is how the reach of funding from the American Rescue Plan supported the child care sector, and how different uses of ARP funds by states may relate to state differences. It is likely that without this funding, the degree of recovery nationwide would have been much smaller. As data on child care stabilization grants become available, analysis may be able to shed light on the impact of the ARP and point to future strategies for supporting the child care market. For example, if the timing of when states distributed funds relative to the onset of the pandemic relates to market recovery, this may guide how future stimulus efforts should be designed to ease administrative burden to release funds. If states with greater geographic targeting of funds experienced more equitable recovery, this may indicate that future funding should take into consideration using indicators of geographic need. The ways in which funding was spent – such as wage stabilization or increases, expanded hiring, retrofitting or renovating infrastructure, or staff professional development – may provide guidance on targeting of funds for specific purposes.
Other factors explaining state differences may be related to how states pursued different strategies for managing the COVID-19 pandemic, including support for telework and expectations for returning to working on site. Some states have pursued deregulation practices or increased compensation, and such variation in state policies beyond the direct pandemic response may also be contributing factors to state differences. Other contextual factors such as the strength of state economies and labor markets may also have played a role. For example, states differ in labor supply and demand, business development, and wage trends in child care and comparable industries. More research is also needed to understand the effects of the pandemic on programs not covered in this brief (e.g., preschool classrooms within school districts and small programs with no employees).

While the number of child care programs exceeded the pre-pandemic level, the average size of child care programs with employees has declined: on average providers had 14.2 employees in January 2020 and 12.6 employees in June 2022. Importantly, the data do not include small providers who do not have employees. If the number of family providers without employees increased, our results may underestimate the decrease in average provider size. Explanations for this shift could be related to cost, labor shortages, or family preferences, among other factors. For example, smaller family child care providers may have better met the needs of families during the pandemic (Porter et al, 2020). One survey of parents with young children in April 2020 found that parents with children in centers were more likely to report that their child care provider was currently closed, compared with parents who sent their children to family child care providers (Bipartisan Policy Center, 2020). Providers may have also relied less on part-time employees and had full-time employees cover shifts that multiple part-time employees previously filled. Provider size has implications for child care policy and practice, and more work is needed to understand the consequences of this national change. For example, larger providers may be better able to adopt mandated standards, while smaller providers may be more flexible to adapt to families’ needs.

Hourly wages for child care workers rose between February 2020 and August 2022; this was due to increased earnings for non-supervisory staff. Reasons for increased wages require further exploration and may include more experienced and higher paid child care workers being more likely to retain their jobs, higher minimum wage laws, tightening of labor markets with child care providers having to compete with other industries for employees, a shift in the labor pool to include more qualified educators, or the impact of the American Rescue Plan child care stabilization dollars within individual states. Understanding the causes of wage increases is important for policy efforts to increase earnings among child care workers. In addition, more research is needed to understand whether these wage increases are found in different states, in different geographies (for example, rural or urban), and among workers of different educational attainment and belonging to different racial and ethnic groups.

Employment and wages in the child care industry continue to be in flux. Continued observation is needed to understand whether the trends described in this brief persist. Some changes—such as those related to wages and program size—run contrary to trends leading up to the pandemic. In particular, maternal employment declined at the beginning of the pandemic and has not yet recovered to pre-pandemic levels, possibly both resulting from and contributing to lower levels of child care employment. Better understanding of how maternal employment and the child care industry interact could help lead to policies that increase employment opportunities in the child care industry while promoting higher wages, and in so doing support maternal employment.
APPENDIX A: SUPPLEMENTAL FIGURES

Figure A.1. Average Constant Dollar Weekly Wages in Child Care Industry

Figure A.2. All Child Care Services Employees by Type, Seasonally Adjusted: October 2019 to October 2022


Note: The Supervisory series shown here in blue is not a BLS series but the residual calculated by ASPE: Supervisory employees = All employees minus Nonsupervisory employees. Seasonal adjustment of the Supervisory series from 2017 to 2022 is based on the average of the seasonal adjustment factors for 2012 to 2016.

Figure A.3. Employed Mothers with Children under Age 6: 2005 to 2021

- **Children under 6**
  - 2005: 23.8 million
  - 2021: 22.9 million

- **Employed mothers**
  - 2005: 9.4 million
  - 2021: 9.1 million


Figure A.4. Change in Total Child Care Payroll by State, First Quarter of 2020 to Second Quarter of 2022

- **Constant dollar change**

REFERENCES


